To: Prasad, Narendra M[NMPrasad@integrysgroup.com]
From: DelRosario, Ross
Sent: Mon 5/13/2013 1:02:51 PM
Subject: FW: North Station - eval of moving well nest P109
Fig 27 from 2034 North Station SSWP Rev 1.pdf
Fig 7 from 2034 North Station SSWP Rev 1.pdf
LaSalle Chest Prop Owner Suggested Well_North Station SSWP Rev 1_DK.pdf

Naren,

See below. We denoted our preferred location for well P109.

Ross

From: David.Klatt@CH2M.com [mailto:David.Klatt@CH2M.com]
Sent: Friday, May 10, 2013 12:21 PM
To: DelRosario, Ross
Cc: Erik.Spande@CH2M.com
Subject: FW: North Station - eval of moving well nest P109

Hi Ross,

We evaluated this request from Integrys to move the well, and believe that the request is reasonable if the well is placed at the south end of the red box (where we inserted a blue box on the attached Lasalle figure). We prefer to keep it as close to the originally proposed location as possible.

We have a couple supporting thoughts/notes that went into this recommendation.

As noted by Naren, the reason the **NOS-MWW/P109** well was placed at this location was largely because of a prior benzene hit at location SMW01 (26 ug/L) (see attached Figure 27). Therefore, this location is preferred for the proposed **NOS-MWW/P109.**

Is there a good reason why the well cannot go at the originally proposed location? If Mr Dikman is concerned about a well stickup, perhaps a flushmount well could be considered. It would be good to ask Integrys to provide documentation of the specific rationale for moving the well for the project record, unless you already know the answer from your meeting.

If **NOS-MWW/P109** is moved to the northwest to within the red box area, we do lose a monitoring point in the far SW corner of the site and also lose a monitoring point along the deep tunnel utility corridor. However, there is well coverage along the deep tunnel to the east at P108 and P107, so we should have some information about potential migration along the utility corridor from those wells.

We also noted that the entire area along the river in this area near **NOS-MWW/P109** was excavated to around 10 feet bgs as part of the remediation (Figure 7) . I presume that it was backfilled with stone, as had been done at other MGP sites. Therefore, I believe we will have a bathtub effect of water in the shallow zone.

Conclusion: Give the presumed stone backfill (bathtub effect), and the prior identification of benzene at locations SMW01, SMW02, SMW03 (Fig 27), it seems likely that a benzene (or BTEX) plume will be confirmed in the shallow groundwater unit. After the installation of the proposed network of well nests, we will have a good indication of the plume extent and groundwater flow direction (the likely flow direction is toward the river under normal water levels). If any of the following wells do confirm BTEX impacts (**NOS-MWW/P109, NOS-MWW/P108, NOS-MWW/P107 NOS-MWW/P115, and NOS-MWW/P106)** and the flow is found to be toward the river, there will be a presumption that similar BTEX concentrations exist at the south end of the site along the deep tunnel corridor at the river. If at any point, Integrys wants to refute an assumption like that, they would need to install a well and collect water samples from this southern end of the site.

Hope that helps.

Dave

David Klatt

Project Manager

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From: DelRosario, Ross [mailto:delrosario.rosauro@epa.gov]
Sent: Thursday, May 09, 2013 1:50 PM
To: Klatt, David/CHC
Subject: FW: North Station - eval of moving well nest P109

Dave,

Can you ask you field person what impact relocating a well, as described below, would have. Thanks!!!!

Ross

From: Prasad, Narendra M [mailto:NMPrasad@integrysgroup.com]
Sent: Thursday, May 09, 2013 12:11 PM
To: DelRosario, Ross
Cc: Bartoszek, Brian F
Subject: North Station - eval of moving well nest P109

Ross,

Per our meeting with Mr. Dikman yesterday, we evaluated at the impacts of moving well next MWW/P109 to the north as he requested.

As a reminder, the current approved location was selected to characterize groundwater quality and flow as near to the southwest corner of the OU as possible. Isolated historic samples of elevated benzene (in groundwater) and naphthalene (in soil) were historically also located in this area. Information from the current approved location would be used to evaluate if affected groundwater, if present, has potential to migrate off site or into the adjacent river area and if flow in the area is affected by placement of the buried utilities. This "perimeter position" in the well network is consistent with well placement on other IBS sites in the Multi-site Program.

The location requested by Mr. Dikman is farther from the edge of the corner of the OU and will not directly provide the exact same information (see attached drawing). It would provide groundwater quality and flow information for the suggested area. If USEPA does feel we can move the well and get comparable data coverage as the original location (without the need to install a fourth well) please advise.

We are planning on performing field work on Mr. Dikman's property the first week of June. Please let me know if you have any questions.

Thanks,

Naren

Naren M. Prasad, P.E., MPH, LEED AP

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